

# Sanitized Copy Approved for Release 2010/01/07 : CIA-RDP87B00305R000701460036-2

### The Director of Central Intelligence Washington, D.C. 20505

Intelligence Research and Development Council

INTELLIGENCE SOURCES AND METHODS INVOLVED 6 May 1981

FROM:	FOR: Deputy Director of Central Intelligence	
. Nort.	Executive Director	
SUBJECT:	A Status Report	
of Defense him to ass Council.	e are still awaiting confirmation of Dr. DeLauer as Under Secretary for Research and Engineering so that we may extend an invitation for ume the Chairmanship of the Intelligence Research and Development However, in the meantime, I thought you might be interested in a ertain on-going Council activities. (C)	V
	a. <u>Second National Digital Imagery Symposium</u>	
	Two years ago the Council sponsored a National Digital Imagery Processing and Exploitation Symposium. The symposium was staffed by the Exploitation Research and Development Subcommittee (EXRAND) of COMIREX. The symposium was held at NPIC, had about 200 attendees, lasted a week, and consisted of numerous sessions and tours with over 60 papers being presented by members of the Federal Government, industry and academia. In the wrap-up report of the symposium steering group, it was recommended that future symposiums be held to continue the exchange of digital imagery technology among the many diverse participants involved in imagery processing and exploitation. (S)	
`\ !	I have asked the members of the Council to offer me their views on sponsoring a second symposium (Attachment A). If they agree, I will draft a tasking letter to the Chairman, EXRAND, to be signed by either Dr. DeLauer, if he is on board, or if not, for your release. EXRAND would like to commence their work some time this month with a target date for the symposium of October or November. (S)	
	DCI STAP/IR&DC Technology Trends Colloquium	
! :	I have had preliminary discussions with Chairman, STIC, concerning the possibility of having a combined DCI STAP/IR&DC Technology Trends Colloquium on emerging technologies for the late 1980s. believes such a joint venture might be profitable and	
1	STIC, concerning the possibility of having a combined DCI STAP/IR&DC	

Sanitized Copy Approved for Release 2010/01/07: CIA-RDP87B00305R000701460036-2

# SECRET

SUBJECT: A Status Report

will discuss the proposal with the Chairman, STAP, who in turn will talk to the new Chairman, IR&DC. The benefit of such a joint venture would be to couple and focus scientific opinions from within, as well as exterior to, the Intelligence Community on what developing technologies may be able to increase our intelligence capabilities. (C)

### c. Future Technological Advancements

In the vein of identifying what opportunities emerging technologies may offer for increasing our future capabilities, I have had the Council members outline what their perceptions are for the future. Six areas have been identified where major changes are forecast:

- o Solid State Electronic Technology
- o Computer Technology
- o Space Science
- o Sensors and Antenna Technology
- o Human Performance
- o Laser Technology. (S)

The attached listing (Attachment B) indicates more specifically within these areas where advancements may occur. I intend to discuss these projections with the new chairman to suggest how the Council might seek out and keep aware of advancements within these fields for possible use by the Intelligence Community. (C)

#### d. New IR&DC Initiatives

The following are several new initiatives which may be sponsored by the Council. These initiatives will tend to provide for more community cohesiveness in our Research and Development Programs and at the same time provide for tangible reward for our intelligence scientific personnel.

2

SUBJECT: A Status Report

#### The Council will:

- o Sponsor a DCI Scientific Fellowship Program.
- o Sponsor Periodic National Intelligence R&D Symposium.
- o Sponsor a yearly DCI Exceptional Scientific Awards Program.
- o Sponsor a DCI Distinguished Scientific Speaker Program.
- o Provide recommendations to the DCI concerning NFIP R&D programs which will be issued in the annual DCI NFIP Program Guidance. (C)
- 2. The above outlines Council considerations which are now being formulated, but of course are subject to your guidance and direction. I understand that Dr. DeLauer's confirmation may occur in the next few weeks. S/2

#### Attachments:

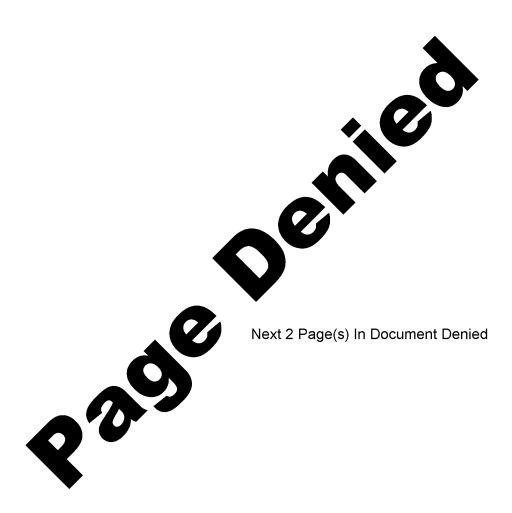
- A. Memo for Distribution, Subj: A Second National Digital Imagery Symposium dtd 1 May 81 (ICS 81-0705)
- B. Future Technological Advances

SECRET.

25X1

Sanitized Copy Ap	pproved for Release 2010/01/07 : CIA-RDP87B00305R000707	1460036-2 25X1
	The Director of Central Intelligence Washington, D.C. 20505	·
Intelligence Research a	ICS 81-0705 . 1 May 1981	
MEMORANDUM FOR:	Distribution	,
FROM:	Executive Director	25X1
SUBJECT:	A Second National Digital Imagery Symposium	
of COMIREX solic Digital Imagery would staff the symposium was he for a week, and being presented. committee in the continue the exc diverse particip.  2. I belied continue to spons will you please that a second symposium will second second symposium will second second symposium will second	been contacted by of the EXRAND citing Council sponsorship of a second National Sym Processing and Exploitation sometime this coming f symposium with Council assistance and guidance. Teld in October 1979 at NPIC, had close to 200 attent consisted of numerous sessions and tours with over By all accounts the symposium was a success and air wrap-up report recommended that future symposium change of digital imagery technology advancements a sants involved in imagery processing and exploitation ve this is a worthwhile Community project for the sor and suggest that we endorse the EXRAND proposal provide me your views on this matter by 11 May, and amposium will be useful, then appropriate tasking we to they may commence their planning.	posium on all. EXRAND he first dees, lasted 60 papers the steering ms be held to mong the many on.  Council to l. Therefore
Under Secret	ctor of Central Intelligence tary of Defense for Research eering-Designate (Dr. DeLauer)	25X1
		•
		25X1
		25/1

WARRING NOTICE
INTELLIBERGE SOURCES
Sanitized Copy Approved for Release 2010/01/07 : CIA-RDP87B00305R000701460036-2



## CONFIDENTIAL

#### Computer Technology

Future computer technology advancements will provide levels of magnitude of increase in the speed of data manipulation and data retrieval. This will be permitted by marked improvements in very high speed integrated circuitry and very large scale integration. Areas to be affected by these new capacities will include:

- o progress towards the development of artificial intelligence
- o better use of robotics
- enhanced management science application techniques
- o increased optical and recording processing and storage technology
- o more interactive computer graphic design
- o different ways of software engineering
- o new voice input/output technology consisting of:
  - -- computer recognizable 1000 world vocabularies
  - -- improvements using VHSIC and VLSI to:
    - speedily machine-gist text and conversations
    - provide an effective environment for transcriptions, for example digital filters, random search on words and the search of the previous day's intercept
    - develop machine-aided translations to improve productivity of scarce linguistic resources and reduce training time
    - continue the development of wordspotting systems to include the development of a reliable speech detection algorithum. (C)

WARNING NOTICE
INTELLIGENCE SOURCES
AND METHODS INVOLVED

CONFIDENTIAL

25X1

